Publications Related to the RoboCup Soccer Simulation League

Compiled by Peter Stone, based on a list started by Gal Kaminka

August 27, 2013

Abstract

This is a partial list of publications that have resulted, directly or indirectly, from the RoboCup Simluation leagues. It was compiled by requesting contributions from subscribers to the simulation league mailing lists, last in July 2013. There are certainly many other publications that have not been included in this list. If you know of any, please send them to Professor Peter Stone at `pstone@cs.utexas.edu`.

Books

1. Oliver Obst. *Controlling Physical Multiagent Teams: Getting League- Independent Results from RoboCup Soccer*. Number 304 in DISKI – Dissertations in Artificial Intelligence. Aka / IOS Press, 2007. ISBN 978-1-58603-705-5.

2. Hans-Dieter Burkhard and Hans-Arthur Marsiske. *Endspiel 2050 - Wie Roboter Fušball spielen lernen*. Heise, 2003.

3. Markus Hannebauer, Jan Wendler, and Enrico Pagello, editors. *Balancing Reactivity and Social Deliberation in MAS – From RoboCup to Real-World Applications*, volume 2103 of *LNAI*. Springer Verlag, 2001.

4. Peter Stone. *Layered Learning in Multiagent Systems: A Winning Approach to Robotic Soccer*. MIT Press, 2000.

Journal Articles

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5. P.H. Abreu, D.C. Silva, J. Mendes-Moreira, L.P. Reis, and J. Garganta. Using multivariate adaptive regression splines in the construction of simulated soccer team's behavior models. *International Journal of Computational Intelligence Systems*, 6(5):893–910, 2013.

6. F. Almeida, P.H. Abreu, N. Lau, and L.P. Reis. An automatic approach to extract goal plans from soccer simulated matches. *Soft Computing*, 17(5):835–848, 2013.

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7. P. Abreu, J. Moreira, I. Costa, D. Castelo, L. Reis, and J. Garganta. Human versus virtual robotics soccer: A technical analysis. *European Journal of Sport Science*, 12(1):26–35, 2012.

8. P.H. Abreu, J. Moura, D.C. Silva, L.P. Reis, and J. Garganta. Performance analysis in soccer: A cartesian coordinates based approach using robocup data. *Soft Computing*, 16(1):47–61, 2012.

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10. Nuno Lau, Luis Seabra Lopes, Gustavo Corrente, Nelson Filipe, and Ricardo Sequeira. Robot team coordination using dynamic role and positioning assignment and role based setplays. *Mechatronics*, 21(2):445–454, 2011. ¡ce:title¿Special Issue on Advances in intelligent robot design for the Robocup Middle Size League¡/ce:title¿.

11. Harukazu Igarashi, Koji Nakamura, and Seiji Ishihara. Learning of soccer player agents using a policy gradient method: Coordination between kicker and receiver during free kicks. *International Journal of Artificial Intelligence and Expert Systems*, 2(1):123–135, April 2011.

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14. Rodrigo da Silva Guerra, Hitoshi Aonuma, Koh Hosoda, and Minoru Asada. Using micro-robots as tools for interdisciplinary studies of insect social interaction. *Journal of Robotics and Mechatronics*, 22(4), August 2010.

15. Rodrigo da Silva Guerra, Hitoshi Aonuma, Koh Hosoda, and Minoru Asada. Semi-automatic behavior analysis using robot/insect mixed society and video tracking. *Journal of Neuroscience Methods*, 2010.

16. Shimon Whiteson, Matthew E. Taylor, and Peter Stone. Critical factors in the empirical performance of temporal difference and evolutionary methods for reinforcement learning. *Journal of Autonomous Agents and Multi-Agent Systems*, 21(1):1–27, 2010.

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17. Matthew E. Taylor and Peter Stone. Transfer learning for reinforcement learning domains: A survey. *Journal of Machine Learning Research*, 10(1):1633–1685, 2009.

18. Martin Riedmiller, Thomas Gabel, Roland Hafner, and Sascha Lange. Reinforcement Learning for Robot Soccer. *Autonomous Robots*, 27(1):55–74, 2009.

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19. Matthew E. Taylor, Peter Stone, and Yaxin Liu. Transfer learning via inter-task mappings for temporal difference learning. *Journal of Machine Learning Research*, 8(1):2125–2167, 2007.

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21. Reza Zafarani and Mohammad Reza Yazdchi. A novel action selection architecture in soccer simulation environment using neuro-fuzzy and bidirectional neural networks. *International Journal of Advanced Robotic Systems*, 4(1):93–101, March 2007.

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25. T. Gabel and M. Riedmiller. Learning a Partial Behavior for a Competitive Robotic Soccer Agent. *KI*, 20(2):18–23, 2006.

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30. Oliver Obst and Markus Rollmann. SPARK – A Generic Simulator for Physical Multiagent Simulations. *Computer Systems Science and Engineering*, 20(5), September 2005.

31. Peter Stone, Richard S. Sutton, and Gregory Kuhlmann. Reinforcement learning for RoboCup-soccer keepaway. *Adaptive Behavior*, 2005.

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35. Itsuki Noda and Peter Stone. The RoboCup soccer server and CMUnited clients: Implemented infrastructure for MAS research. *Autonomous Agents and Multi-Agent Systems*, 7(1–2):101–120, July–September 2003.

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